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EXAMINER	
LI, SHI K	

ART UNIT	PAPER NUMBER
2633	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/674,755	Applicant(s) TASTO ET AL.	
	Examiner Shi K. Li	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-24 and 27-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-24 and 27-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 17-18, 27-30, 33-34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Fischer et al. (U.S. Patent 6,151,480).

Regarding claim 17, Fischer et al. discloses in FIG. 1 a communication system comprising a plurality of cordless communication devices 104-1, ..., 104-N, and a headend unit 102. The cordless communication devices are connected to a power line network 110 and 112. Fischer et al. teaches in col. 3, lines 44-46 that the cordless communication devices are used for transmitting data to cellular, personal communication systems, broadcast video, broadcast audio, etc. Therefore, these devices handle broadband data transmission via the power line network. Fischer et al. illustrates in FIG. 1 that the headend unit provides connection to an external communication network and control data communication between the cordless communication devices.

Regarding claim 18, Fischer et al. teaches in col. 3, lines 26-29 that the cordless communication devices use radio frequency for transmission.

Regarding claim 27, Fischer et al. teaches in col. 4, line 39 that the headend unit is connected to the external communication network via fiber-optics cable.

Regarding claim 28, Fischer et al. teaches in col. 4, lines 37-39 that the headend unit is connected to the external communication via RF antenna.

Regarding claim 29, inherently, AC power line in U.S. is 110 volt.

Regarding claim 30, Fischer et al. teaches in col. 3, line 28 that the cordless communication devices are deployed in a building. Inherently, a video display or a personal communication system is installed in living room, bedroom, conference room, etc.

Regarding claims 33-34, Fischer et al. teaches in col. 3, lines 26-28 to provide RF distribution system throughout a building. Inherently, a building comprises rooms separated by walls.

Regarding claim 37, Fischer et al. teaches in FIG. 3 to provide power for the remote unit from the AC power line.

3. Claims 33-34 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by Lueker et al. (U.S. Patent 6,130,896).

Regarding claims 33-34, Lueker et al. discloses in FIG. 1 a powerline based network and the general idea of having multiple access points (cordless communication devices) being connected to a power supply network. Lueker et al. further discloses in FIG. 6A and col. 4, lines 59-62 the placement of access points in cells for communication with untethered devices. Lueker et al. teaches to use an AN1000 chipset by Adaptive Networks for physical layer circuitry (see col. 3, line 50). The AN1000 chipset allows data communication at 100 kbps and supports broadband communication. Lueker et al. teaches in FIG. 6B that access points in different cells. Lueker teaches in col. 4, lines 62-64 that there may be walls between cells.

Regarding claim 37, Lueker et al. teaches in FIG. 1 untethered electrical devices 38, 40 and 42 and tethered electrical devices 22, 26 and 28. Inherently, the portable computer 22, computer 26 and printer 28 obtain power from the powerline. Lueker et al. teaches in col. 2, lines 52-56 that untethered electrical devices may be in electrical communication through, for

example, RF signals with one or more of the electrical devices coupled to network 10, including a tethered electrical device. Lueker et al. teaches in col. 2, lines 36-39 that electrical outlets, such as outlets 16 and 18 provide, may power from powerline 14 to various electrical devices. Lueker et al. further teaches in FIG. 4 and col. 4, lines 19-22 electrical device 26 with power supplied by the power supply network. That is, Lueker et al. teaches (a) portable computer 22, desktop computer 26 and printer 28 are electrical devices that are tethered with respect to powerline 14; (b) they may act as cordless communication device and communicate via, for example, RF with untethered electrical devices; (c) the powerline may provide power to these electrical devices.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 17-18 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. (U.S. Patent 6,130,896) in view of Propp et al. (U.S. Patent 5,774,526).

Regarding claim 17, Lueker et al. discloses in FIG. 1 a powerline based network and the general idea of having multiple access points (cordless communication devices) being connected to a power supply network. Lueker et al. further discloses in FIG. 6A and col. 4, lines 59-62 the placement of access points in cells for communication with untethered devices. Lueker et al. teaches to use an AN1000 chipset by Adaptive Networks for physical layer circuitry (see col. 3, line 50). The AN1000 chipset allows data communication at 100 kbps and supports broadband communication. The difference between Lueker et al. and the claimed invention is that Lueker et al. does not include a controller for connection to an external communication network. Propp

et al. teaches in FIG. 2 the inclusion of a controller 202 in a power line network. Propp et al. teaches in col. 5, lines 48-50 the connection between the controller and an external network via cable, microwave, radio-wave or optical link. One of ordinary skill in the art would have been motivated to combine the teaching of Propp et al. with the communication system of Lueker et al. because a controller can be used to manage the network as described in col. 3, line 65-col.4, line 12 of Propp et al. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a controller, as taught by Propp et al., in the communication system of Lueker et al. because a controller can be used to manage the network.

Regarding claim 18, Lueker et al. suggests the use of RF for wireless communication.

Regarding claim 27-28, Propp et al. teaches in col. 5, lines 48-50 the connection between the controller and an external network via cable, microwave, radio-wave or optical link.

Regarding claim 29, Lueker et al. suggests the use of powerlines found in homes for connecting the access points. These powerlines are inherently of 110 volt in United States.

6. Claims 19, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (U.S. Patent 6,151,480) in view of Hämmerling et al. (U.S. Patent 4,443,786).

Fischer et al. has been discussed above in regard to claims 17-18, 27-30, 33-34 and 37. Regarding claim 19, the difference between Fischer et al. and the claimed invention is that Fischer et al. does not use infrared radiation for cordless transmission. Hämmerling et al. teaches in FIG. 1 a communication system where a plurality of fixed modules are connected via the power line and communicate to movable modules via infra-red rays. One of ordinary skill in the art would have been motivated to combine the teaching of Hämmerling et al. with the power line communication system of Fischer et al. because RF signals interfere with other devices and are

regulated, therefore, their power and bandwidth are restricted while infrared wireless provides high bandwidth and long distance communication. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use infrared radiation for wireless communication, as taught by Hämmerling et al., in the power line communication system of Fischer et al. because RF signals interfere with other devices and are regulated, therefore, their power and bandwidth are restricted while infrared wireless provides high bandwidth and long distance communication.

Regarding claims 36 and 38, infrared communications operate at a frequency greater than 100 GHz.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. and Propp et al. as applied to claims 17-18 and 27-29 above, and further in view of Hämmerling et al. (U.S. Patent 4,443,786).

Lueker et al. and Propp et al. have been discussed above in regard to claims 17-18 and 27-29. The difference between Lueker et al. and Propp et al. and the claimed invention is that the modified powerline based network of Lueker et al. and Propp et al. does not use infrared radiation for cordless transmission. However, Lueker et al. suggests that untethered device may communicate via optical signals (see col. 2, line 52). Hämmerling et al. teaches in FIG. 1 a communication system where a plurality of fixed modules are connected via the power line and communicate to movable modules via infra-red rays. One of ordinary skill in the art would have been motivated to combine the teaching of Hämmerling et al. with the modified powerline based network of Lueker et al. and Propp et al. because RF signals interfere with other devices and are regulated, therefore, their power and bandwidth are restricted while infrared wireless provides

high bandwidth and long distance communication. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use infrared radiation for wireless communication, as taught by Hämmerling et al., in the modified powerline based network of Lueker et al. and Propp et al. because RF signals interfere with other devices and are regulated, therefore, their power and bandwidth are restricted while infrared wireless provides high bandwidth and long distance communication.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. and Hämmerling et al. as applied to claim 19 above, and further in view of Scifres (U.S. Patent 6,025,942).

Fischer et al. and Hämmerling et al. have been discussed above in regard to claim 19. Regarding claim 20, the difference between Fischer et al. and Hämmerling et al. and the claimed invention is that Fischer et al. and Hämmerling et al. do not specify the modulation technology used for the infrared rays. Scifres teaches in col. 2, lines 42 the use of amplitude modulation for adding the data to the infrared carrier. One of ordinary skill in the art would have been motivated to combine the teaching of Scifres with the modified power line communication system of Fischer et al. and Hämmerling et al. because amplitude modulation is simple to implement and easy to understand. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use amplitude modulation for adding data to the infrared carrier, as taught by Scifres, in the modified power line communication system of Fischer et al. and Hämmerling et al. because amplitude modulation is simple to implement and easy to understand.

9. Claims 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al., Propp et al. and Hämmerling et al. as applied to claim 19 above, and further in view of Scifres (U.S. Patent 6,025,942).

Lueker et al., Propp et al. and Hämmerling et al. have been discussed above in regard to claim 19. Regarding claim 20, the difference between Lueker et al., Propp et al. and Hämmerling et al. and the claimed invention is that Lueker et al., Propp et al. and Hämmerling et al. do not specify the modulation technology used for the infrared rays. Scifres teaches in col. 2, lines 42 the use of amplitude modulation for adding the data to the infrared carrier. One of ordinary skill in the art would have been motivated to combine the teaching of Scifres with the modified powerline based network of Lueker et al., Propp et al. and Hämmerling et al. because amplitude modulation is simple to implement and easy to understand. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use amplitude modulation for adding data to the infrared carrier, as taught by Scifres, in the modified powerline based network of Lueker et al., Propp et al. and Hämmerling et al. because amplitude modulation is simple to implement and easy to understand.

Regarding claim 30, Scifres suggests in FIG. 2 to have the wireless modules in rooms.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (U.S. Patent 6,151,480) in view of Baum et al. (U.S. Patent 5,828,660).

Fischer et al. has been discussed above in regard to claims 17-18, 27-30, 33-34 and 37. The difference between Fischer et al. and the claimed invention is that Fischer et al. does not specify the modulation technologies. Baum et al. teaches in col. 2, lines 33-57 to use OFDM and OFDM-like digital modulation techniques to avoid interference and efficiently utilize bandwidth.

One of ordinary skill in the art would have been motivated to combine the teaching of Baum et al. with the power line communication system of Fischer et al. because the method of Baum et al. avoids interference and efficiently utilizes bandwidth. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use digital modulation techniques such as OFDM and OFDM-like method of Baum et al. in the power line communication system of Fischer et al. because this method avoids interference and efficiently utilizes bandwidth.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. and Propp et al. as applied to claims 17-18 and 27-29 above, and further in view of Baum et al. (U.S. Patent 5,828,660).

Lueker et al. and Propp et al. have been discussed above in regard to claims 17-18 and 27-29. The difference between Lueker et al. and Propp et al. and the claimed invention is that Lueker et al. and Propp et al. do not specify the modulation technologies. Baum et al. teaches in col. 2, lines 33-57 to use OFDM and OFDM-like digital modulation techniques to avoid interference and efficiently utilize bandwidth. One of ordinary skill in the art would have been motivated to combine the teaching of Baum et al. with the modified powerline based network of Lueker et al. and Propp et al. because the method of Baum et al. avoids interference and efficiently utilizes bandwidth. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use digital modulation techniques such as OFDM and OFDM-like method of Baum et al. in the modified powerline based network of Lueker et al. and Propp et al. because this method avoids interference and efficiently utilizes bandwidth.

12. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. and Hämmerling et al. as applied to claim 19 above, and further in view of Sakanaka et al. (U.S. 5,680,241).

Fischer et al. and Hämmerling et al. have been discussed above in regard to claim 19. The difference between Fischer et al. and Hämmerling et al. and the claimed invention is that Fischer et al. and Hämmerling et al. do not specify the wavelengths used for the infrared carrier. Sakanaka et al. teaches in col. 4, lines 50-58 the choice of various wavelengths depending on the transmission distance and safety consideration. One of ordinary skill in the art would have motivated to combine the teaching of Sakanaka et al. with the modified power line communication system of Fischer et al. and Hämmerling et al. because choosing the right wavelength gives maximal safety or transmission distance. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to choose of wavelength in the range of 800 nm~1000 nm or 1200 nm~1400 nm, as taught by Sakanaka et al., in the modified power line communication system of Fischer et al. and Hämmerling et al. because choosing the right wavelength gives maximal safety or transmission distance.

13. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al., Propp et al. and Hämmerling et al. as applied to claim 19 above, and further in view of Sakanaka et al. (U.S. 5,680,241).

Lueker et al., Propp et al. and Hämmerling et al. have been discussed above in regard to claim 19. The difference between Lueker et al., Propp et al. and Hämmerling et al. and the claimed invention is that Lueker et al., Propp et al. and Hämmerling et al. do not specify the wavelengths used for the infrared carrier. Sakanaka et al. teaches in col. 4, lines 50-58 the choice

of various wavelengths depending on the transmission distance and safety consideration. One of ordinary skill in the art would have motivated to combine the teaching of Sakanaka et al. with the modified powerline based network of Lueker et al., Propp et al. and Hämmerling et al. because choosing the right wavelength gives maximal safety or transmission distance. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to choose of wavelength in the range of 800 nm~1000 nm or 1200 nm~1400 nm, as taught by Sakanaka et al., in the modified powerline based network of Lueker et al., Propp et al. and Hämmerling et al. because choosing the right wavelength gives maximal safety or transmission distance.

14. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. and Hämmerling et al. as applied to claim 19 above, and further in view of Farber et al. (U.S. Patent 5,969,837).

Fischer et al. and Hämmerling et al. have been discussed above in regard to claim 19. The difference between Fischer et al. and Hämmerling et al. and the claimed invention is that Fischer et al. and Hämmerling et al. do not use a surface-emitting semiconductor laser as the light emitter. Farber et al. teaches in col. 4, lines 30-31 the use of surface-emitting laser as the light source for wireless communication. One of ordinary skill in the art would have motivated to combine the teaching of Farber et al. with the modified power line communication system of Fischer et al. and Hämmerling et al. because surface-emitting laser is inexpensive, easy to drive yet has high output power. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use surface-emitting laser as light source, as taught by Sakanaka et al., in the modified power line communication system of Fischer et al. and

Hämmerling et al. because surface-emitting laser is inexpensive, easy to drive yet has high output power.

15. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al., Propp et al. and Hämmerling et al. as applied to claim 19 above, and further in view of Farber et al. (U.S. Patent 5,969,837).

Lueker et al., Propp et al. and Hämmerling et al. have been discussed above in regard to claim 19. The difference between Lueker et al., Propp et al. and Hämmerling et al. and the claimed invention is that Lueker et al., Propp et al. and Hämmerling et al. do not use a surface-emitting semiconductor laser as the light emitter. Farber et al. teaches in col. 4, lines 30-31 the use of surface-emitting laser as the light source for wireless communication. One of ordinary skill in the art would have motivated to combine the teaching of Farber et al. with the modified powerline based network of Lueker et al., Propp et al. and Hämmerling et al. because surface-emitting laser is inexpensive, easy to drive yet has high output power. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use surface-emitting laser as light source, as taught by Sakanaka et al., in the modified powerline based network of Lueker et al., Propp et al. and Hämmerling et al. because surface-emitting laser is inexpensive, easy to drive yet has high output power.

16. Claims 31-32 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al. (U.S. Patent 6,151,480) in view of White et al. (U.S. Patent 6,400,968 B1).

Fischer et al. has been discussed above in regard to claims 17-18, 27-30, 33-34 and 37. The difference between Fischer et al. and the claimed invention is that Fischer et al. does not teach to screw the access points into incandescent bulk socket. White et al. teaches in FIG. 3A

the screwing of a network module into an incandescent bulk socket. One of ordinary skill in the art would have been motivated to combine the teaching of White et al. with the communication system of Fischer et al. because by screwing into the bulk socket the module is connected to the power line and mounted in a position for wireless communication. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to screw the access point module into an incandescent bulk socket, as taught by White et al., in the communication system of Fischer et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication.

17. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. and Propp et al. as applied to claims 17-18 and 27-29 above, and further in view of White et al. (U.S. Patent 6,400,968 B1).

Lueker et al. and Propp et al. have been discussed above in regard to claims 17-18 and 27-29. The difference between Lueker et al. and Propp et al. and the claimed invention is that Lueker et al. and Propp et al. do not teach to screw the access points into incandescent bulk socket. White et al. teaches in FIG. 3A the screwing of a network module into an incandescent bulk socket. One of ordinary skill in the art would have been motivated to combine the teaching of White et al. with the modified communication system of Lueker et al. and Propp et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to screw the access point module into an incandescent bulk socket, as taught by White et al., in the modified communication system of Lueker et al. and

Propp et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication.

18. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. (U.S. Patent 6,130,896) in view of White et al. (U.S. Patent 6,400,968 B1).

Lueker et al. has been discussed above in regard to claims 33-34 and 37. The difference between Lueker et al. and the claimed invention is that Lueker et al. does not teach to screw the access points into incandescent bulk socket. White et al. teaches in FIG. 3A the screwing of a network module into an incandescent bulk socket. One of ordinary skill in the art would have been motivated to combine the teaching of White et al. with the communication system of Lueker et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to screw the access point module into an incandescent bulk socket, as taught by White et al., in the communication system of Lueker et al. because by screwing into the bulk socket the module is connected to the powerline and mounted in a position for wireless communication.

19. Claim 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lueker et al. (U.S. Patent 6,130,896) in view of Hämmerling et al. (U.S. Patent 4,443,786).

Lueker et al. has been discussed above in regard to claims 33-34 and 37. The difference between Lueker et al. and the claimed invention is that the communication terminal of Lueker et al. does not operate at a frequency greater than 10 GHz or 100 GHz. However, Lueker et al. suggests that untethered device may communicate via optical signals (see col. 2, line 52). Hämmerling et al. teaches in FIG. 1 that optical (infrared) carrier can be used for the wireless

link. One of ordinary skill in the art would have been motivated to combine the teaching of Hämmerling et al. with the communication system of Lueker et al. because optical carrier provides wide bandwidth. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use optical carrier for the wireless link, as taught by Hämmerling et al., in the communication system of Lueker et al. because optical carrier provides wide bandwidth.

Response to Arguments

20. Applicant's arguments filed 16 July 2004 have been fully considered but they are not persuasive.

Regarding claim 17, the Applicant argues that Lueker et al. and Propp et al. do not teaches a control unit "configured to control data communication between the cordless communication devices and produce a connection to an external communication network". The Examiner disagrees. As admitted by the Applicant, Propp et al. teaches in col. 3, line 65-col. 4, line 12 that the controller performs the local power line network management and control functions including local address allocation and management, such as dynamic address assignment and network address/phone number association, and administering network access using dynamic voice/data channel allocation and management. The controller also provides high speed multiplexing to multiplex/demultiplex voice/data packets to and from higher level switching systems. That is, the controller controls data communication between the cordless communication devices. Furthermore, Propp et al. teaches in col. 5, lines 44-48 that the network-side connection 206 of controller 202 may be directly connected to a conventional

telephone company central office, or alternatively may be connected to a higher level switching apparatus.

Regarding claim 33, the Applicant argues that Lueker fails to teach first and second cordless communication devices in respective first and second communication cells separated from each other by a wall. The Examiner disagrees. Lueker et al. teaches in FIG. 6B that access points in different cells. Lueker teaches in col. 4, lines 62-64 that there may be walls between cells.

Regarding claim 37, the Applicant argues that Lueker fails to teach the limitation "connecting the first and second cordless communication devices together via a power supply network which also supplies power to the first and second communication devices". The Examiner disagrees. Lueker et al. teaches in FIG. 1 untethered electrical devices 38, 40 and 42 and tethered electrical devices 22, 26 and 28. Inherently, the portable computer 22, computer 26 and printer 28 obtain power from the powerline. Lueker et al. teaches in col. 2, lines 52-56 that untethered electrical devices may be in electrical communication through, for example, RF signals with one or more of the electrical devices coupled to network 10, including a tethered electrical device. Lueker et al. teaches in col. 2, lines 36-39 that electrical outlets, such as outlets 16 and 18 provide, may power from powerline 14 to various electrical devices. Lueker et al. further teaches in FIG. 4 and col. 4, lines 19-22 electrical device 26 with power supplied by the power supply network. That is, Lueker et al. teaches (a) portable computer 22, desktop computer 26 and printer 28 are electrical devices that are tethered with respect to powerline 14; (b) they may act as cordless communication device and communicate via, for example, RF with untethered electrical devices; (c) the powerline may provide power to these electrical devices.

Therefore, Lueker et al. teaches the said limitation and the Applicant's argument is not persuasive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

skl

M. R. Sedighian

M. R. SEDIGHIAN
PRIMARY EXAMINER